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MEMORANDUM

SUBJECT: Analysis of the Potential Economic Impacts of Delaying NCPs

FROM: Charles Moulis, Senior Environmental Engineer
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TO: Docket Number EPA-HQ-OAR-1000

DATE: January 18, 2012

Introduction – Late in 2011, EPA was notified by Navistar International Corporation that it is likely to consume its current supply of NO_x emission credits for its heavy heavy-duty diesel engines sometime in 2012. Based on its current credit balance and projected sales for this service class, we have concluded that credits will likely be depleted in the early part of 2012. Navistar has not provided EPA with any 2012 model year applications for certification for which EPA could certify Navistar-produced heavy heavy-duty diesel engines as meeting the 0.20 g/hp-hr standard without credits. Therefore, all indications are that without nonconformance penalties (NCPs), Navistar would soon be prohibited from introducing into U.S. commerce any new heavy heavy-duty engines. At a minimum, this would have led to Navistar ceasing nearly all assembly of heavy heavy-duty diesel engines. Navistar may or may not have continued production of heavy heavy-duty engines for export. Since Navistar's current tractor designs would need to be redesigned to accept other manufacturers' SCR-equipped engines, it would likely also have led to Navistar ceasing assembly of heavy heavy-duty vehicles for up to a year.

EPA has determined that the only way in which it can make non-conformance penalties (NCPs) available for the bulk of the 2012 model year is to establish them through an Interim Final Rule. This memorandum summarizes EPA's analysis of the potential economic impacts of delaying NCPs. Note that the potential economic impacts of not having NCPs available when Navistar exhausts its credits was part of the justification given for setting interim NCPs.

Summary of Current Navistar Operations – According to Navistar's 2010 Annual Report, its global operations employed more than 15,000 workers and had net revenues over \$12 billion in 2010. It manufactures medium and heavy heavy-duty highway diesel engines and vehicles. It also manufactures military vehicles. We estimate that its heavy heavy-duty Class 8 tractor sales represent about one-quarter of its revenue.

Workers Making Heavy Heavy-duty Engines and Vehicles - While we do not have details of how many of Navistar's employees are currently involved in the assembly of heavy heavy-duty diesel engines and vehicles, if it is proportional to revenue, then it could be one-quarter of Navistar's employees. Halting nearly all assembly of heavy heavy-duty diesel engines and vehicles would have likely resulted in the layoff of these workers and would also have had a cascading impact on Navistar's suppliers, dealers, and other businesses that support the assembly plants. Thus, this scenario would likely have resulted in the layoff of several thousand workers.

Corporate Solvency – It is unclear how much the loss of about one-quarter of Navistar’s annual revenue would have affected the rest of the corporation in the near term. It is possible that the rest of its operations would have continued unchanged. However, it is also possible that this loss of revenue would have resulted in additional layoffs beyond those workers that build heavy heavy-duty engines and vehicles. Moreover, EPA cannot rule out the possibility that this would have threatened the overall solvency of Navistar. Thus, it is possible that overall job losses could have been significantly more than the thousands potentially affected directly.

Impact on the Rest of the Heavy-Duty Market - If Navistar had been forced to halt its Class 8 truck production, it would have also affected its customers and the other truck manufacturers. Those trucking companies that negotiated contracts with Navistar for the purchase of new trucks would have been unable to take delivery of all of the trucks ordered. They likely would have then negotiated new contracts to purchase new trucks from Navistar’s competitors, who then would have ramped up production of their vehicles (and asked their suppliers to ramp up production) to meet this new demand. Ultimately, this may have resulted in a number of new jobs that would essentially offset the job losses at Navistar. However, it is likely that it would have taken manufacturers and suppliers at least several months, and perhaps as much as a year, to increase production enough to fully meet the new demand. The new jobs may have lagged even more if manufacturers chose to initially increase overtime hours instead of hiring new workers.